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Andrianov has also done extensive work on the chlorination of diphenyl. The most important result of this work was the isolation of a definite type of polychlorodiphenyls, the mixtures of which have no tendency to crystallize. The work done by Andrianov in this field served as a basis for the development of a new liquid dielectric, sovol.

In 1932-35 Andrianov published a series of papers on high-molecular compounds which dealt with the kinetics of the condensation of phenols with acrolein and other aldehydes in the presence of acidic or alkaline catalysts.

In the course of work on the preparation of soluble resins, Andrianov synthesized oil-soluble hexylphenol-formaldehyde resins and aniline-formaldehyde resins. Of particular significance is Andrianov's work on the reactions leading to the formation of polyvinylacetal resins and the creation, on the basis of these resins, of the insulating coating viniflex for electric wires.

His investigations in the field of electrical insulation are well known. They are published in the form of articles and monographs. In a number of his published works Andrianov examines general theoretical problems pertaining to dielectrics; discusses the heat stability, chemical stability, resistance to moisture, resistance to fire, and dielectric properties of substances suitable for use as dielectrics; and makes definite conclusions in regard to the direction which future work must take if it is to result in the development of the most effective dielectrics. The new electric insulating materials developed by Andrianov personally or under his direction are being applied at present on an extensive scale in the electrical industry.

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50X1-HUM

- 2 -

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